

FORM PTO-1449 (SUBSTITUTE)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
(37 CFR 1.98(b))Attorney Docket No.:  
EHF 2001,0167 PApplic. No.  
09/873,230

Applicant

Norbert Benesch et al.

Filing Date  
June 4, 2001Group Art Unit  
2621

## U.S. PATENT DOCUMENTS

EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE
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## FOREIGN PATENT DOCUMENT

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	TRANSL. YES   NO
JS	J	61 169 750	07/31/86	Japan			X
JS	K	62 200 251	09/03/87	Japan			X
JS	L	9 191 032	07/22/97	Japan			X
JS	M	9 318 330	12/12/97	Japan			X
	N						

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

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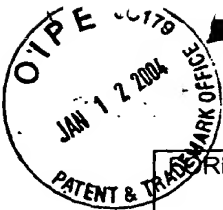
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John Drury

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6/16/04

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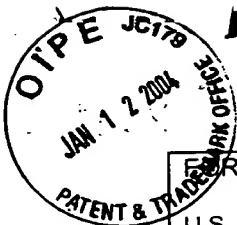
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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

JS	O	M. G. Moharam et al.: "Three-dimensional vector coupled-wave analysis of planar-grating diffraction", <i>J. Opt. Soc. Am.</i> , Vol. 73, No. 9, September 1983, pp. 1105-1112
JS	P	M. G. Moharam et al.: "Rigorous coupled-wave analysis of metallic surface-relief gratings", <i>J. Opt. Soc. Am. A</i> , Vol. 3, No. 11, November 1986, pp. 1780-1787

EXAMINER <i>John Strup</i>	DATE CONSIDERED 6/16/04
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JS	O	S. S. H. Naqvi et al.: "Etch depth estimation of large-period silicon gratings with multivariate calibration of rigorously simulated diffraction profiles", <i>J. Opt. Soc. Am. A</i> , Vol. 11, No. 9, September 1994, pp. 2485-2493
JS	P	Christopher J. Raymond et al.: "Multiparameter grating metrology using optical scatterometry", <i>J. Vac. Sci. Technol. B</i> , Vol. 15, No. 2, March/April 1997, pp. 361-368

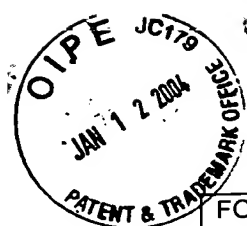
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John H. Ray

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JS	O	Jörg Bischoff et al.: "New aspects of optical scatterometry applied to microtechnology", SPIE, Vol. 3215, 1997, pp. 144-155
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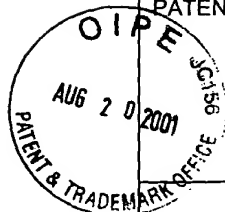
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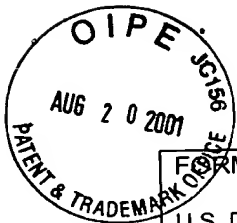
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EXAMINER <i>John Hrege</i>				DATE CONSIDERED <i>6/16/04</i>			
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U.S. PATENT DOCUMENTS									
EXAMINER INITIALS		PATENT NO.	DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE		
JS	A	4,964,726	10/23/90	Kleinknecht et al.					
JS	B	5,703,692	12/30/97	McNeil et al.					
JS	C	5,830,611	11/03/98	Bishop et al.					
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		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	TRANSL. YES   NO		
JS	J	198 24 624 A1	02/25/99	Germany				X	
JS	K	0 874 396 A2	10/28/98	Europe				X	
	L								
	M								
	N								
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)									
JS	O	Scott Bushman et al.: "Scatterometry Measurements for Process Monitoring of Polysilicon Gate Etch", SPIE, vol. 32131997, pp. 79-90, XP-000890146							
JS	P	Stephen A. Coulombe et al.: "Ellipsometric-Scatterometry for sub-0.1 $\mu\text{m}$ CD measurements", SPIE, vol. 3332, 1998, pp. 282-293, XP-000890148							
EXAMINER <i>John Stapp</i>				DATE CONSIDERED 6/16/04					
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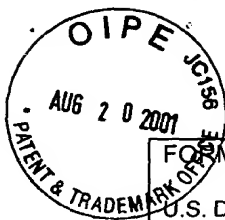
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JS	O	Jörg Bischoff et al.: "Optical scatterometry of quarter micron patterns using neural regression", SPIE, 1998, vol. 3332, pp. 526-537, XP-000890149
JS	P	N. Benesch et al.: Application and cost analysis of scatterometry for integrated metrology", SPIE, vol. 3743, May 1, 1999, pp. 25-32, XP-000890150

EXAMINER <i>John H. Stapp</i>	DATE CONSIDERED 6/16/04
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JS	O	Michael R. Murnane et al.: "Developed photoresist metrology using scatterometry", SPIE, vol. 2196, March 1994, pp. 47-59, XP-000890152
JS	P	Ilkka Kallioniemi et al.: "Optical scatterometry of subwavelength diffraction gratings: neural-network approach", Applied Optics, vol. 37, No. 25, September 1, 1998, pp. 5830-5835, XP-000890173

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JS	A	5,768,192	06/16/98	Eitan			
JS	B	6,011,725	01/04/00	Eitan			
JS	C	6,191,459 B1	02/20/01	Hofmann et al.			
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	J	196 00 422 C1	08/21/97	Germany			X
	K	196 03 810 C1	08/28/97	Germany			X
	L	195 45 903 A1	06/12/97	Germany			X
	M	196 00 423 A1	07/17/97	Germany			X
	N	WO 99/60631	11/25/99	WIPO			X

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

JS	O	Junko Tanaka et al.: "A Sub-0.1- $\mu$ m Grooved Gate MOSFET with High Immunity to Short-Channel Effects", IEDM 93, pp. 537-540;
JS	P	Ken-ichiro Nakagawa et al.: "A Flash EEPROM Cell with Self-Aligned Trench Transistor & Isolation Structure", 2000 Symposium on VLSI Technology Digest of Technical Papers

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